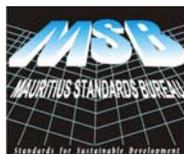

Plastics piping systems for non-pressure underground drainage and sewerage - Unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE) –

Part 2:

Specifications for manholes and inspection chambers in traffic areas and deep underground installations

ICS 93.030



**Mauritius Standards Bureau
Moka**

Gr 12

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National foreword

This Mauritian Standard is identical with the European Standard **EN 13598-2:2009**, *Plastics piping systems for non-pressure underground drainage and sewerage – Unplasticized poly(vinylchloride) (PVC-U), polypropylene (PP), and polyethylene (PE) - Part 2: Specifications for manholes and inspection chambers in traffic areas and deep underground installations*. It was adopted by the Mauritius Standards Bureau on the recommendation of the **Building and Construction Standards Committee** and approval of the **Standards Council** on 2 February 2011. It was notified in the Government Gazette on **26 February 2011***.

For the purposes of this standard the following changes should be made:

- (i) the words “European Standard” should be replaced by “Mauritian Standard”,
- (ii) the “decimal comma” to be replaced by “decimal point”.

This standard consists of the following parts under the general title “*Plastics piping systems – Thermoplastic ancillary fittings for non-pressure underground drainage and sewerage – Unplasticized poly(vinylchloride) (PVC-U), polypropylene (PP) and polyethylene(PE)*”

- *Part 1: Specification for ancillary fittings including shallow inspection chambers*
- *Part 2: Specifications for thermoplastics manholes and inspection chambers in traffic areas and deep underground installations*

The following Mauritian Standards are identical to the European Standards, which are referenced in the adopted standard:

European Standards	Mauritian Standards
EN 13476	MS EN 13476:2007 , <i>Plastics piping systems for non-pressure underground drainage and sewerage – Structured-wall piping systems of unplasticized poly(vinylchloride) (PVC-U), polypropylene (PP) and polyethylene (PE) –</i>
Part 1	<i>Part 1: General requirements and performance characteristics</i>
Part 2	<i>Part 2: Specifications for pipes and fittings with smooth internal and external surface and the system, Type A</i>
Part 3	<i>Part 3: Specifications for pipes and fittings with smooth internal profiled external surface and the system, Type B</i>

* **General Notice No 439 of 2011.**

English Version

Plastics piping systems for non-pressure underground drainage
and sewerage - Unplasticized poly(vinyl chloride) (PVC-U),
polypropylene (PP) and polyethylene (PE) - Part 2:
Specifications for manholes and inspection chambers in traffic
areas and deep underground installations

Systèmes de canalisations en plastique pour les
branchements et les collecteurs d'assainissement enterrés
sans pression - Poly(chlorure de vinyle) non plastifié (PVC-
U), polypropylène (PP) et polyéthylène (PE) - Partie 2:
Spécifications relatives aux regards et aux boîtes
d'inspection et de branchement dans les zones de
circulation et dans les réseaux enterrés profondément

Kunststoff-Rohrleitungssysteme für erdverlegte drucklose
Abwasserkanäle und -leitungen - Weichmacherfreies
Polyvinylchlorid (PVC-U), Polypropylen (PP) und
Polyethylen (PE) - Teil 2: Anforderungen an
Einsteigschächte und Kontrollschächte für Verkehrsflächen
und tiefe Erdverlegung

This European Standard was approved by CEN on 11 November 2008.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN 13598-2:2009) has been prepared by Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems”, the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2009, and conflicting national standards shall be withdrawn at the latest by July 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This European standard is a supplementary standard for System Standards for plastics piping systems of a particular material for a specified application. There are a number of such System Standards.

System Standards are based on the results of the work being undertaken in ISO/TC 138 “*Plastics pipes, fittings and valves for the transport of fluids*”, which is a Technical Committee of the International Organisation for Standardisation (ISO).

They are supported by separate standards on test methods and by European Standards for thermoplastic underground drainage and sewerage systems, to which references are made throughout the System Standard.

The System Standards are consistent with general standards on functional requirements and on recommended practice for installation.

This European Standard consists of the following parts under the general title *Plastics piping systems for non-pressure underground drainage and sewerage — Unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE)*.

- *Part 1: Specification for ancillary fittings including shallow inspection chambers*
- *Part 2: Specifications for manholes and inspection chambers in traffic areas and deep underground installation* (this standard)
- *Part 3: Assessment of conformity* (CEN/TS under preparation)

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies the definitions and requirements for buried manholes and inspection chambers installed to a maximum depth of 6 m from ground level to the invert of the main chamber and manufactured from unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP), polypropylene with mineral modifier (PP-MD) or polyethylene (PE). These products are intended for use in pedestrian or vehicular traffic areas and underground installations conforming to the general requirements given in EN 476 and are used outside the building structure (application area code "U"). They are therefore marked accordingly with a "U". Such products are also deemed to meet the requirements of EN 13598-1 for application area U without the need for further testing. If additionally marked application area D then these products must additionally be tested to show compliance to the elevated temperature cycling requirement of Clause 10 of EN 13598-1.

This European Standard is only applicable to those chamber / manhole items where the manufacturer has clearly stated in the documentation how the components shall be assembled to create a complete manhole or inspection chamber.

The inspection chambers covered by this European Standard comprise the following:

- inspection chambers providing access to the drainage or sewerage system by means of inspection and cleaning equipment.
- chambers, designated as manholes providing man access to the drainage or sewerage system.

The inspection chamber / manhole can be manufactured by various methods e.g. injection moulding, rotational moulding, low-pressure moulding or fabricated from components made in accordance with other standards.

The jointing of components can be achieved using:

- elastomeric ring seal joints;
- adhesive joints for PVC-U;
- welded joints for PVC-U, PP and PE;
- extrusion welding;
- mechanical jointing.

NOTE Both manholes and inspection chambers can be site assembled from different components, but can also be manufactured as a single unit. In either case, the following functional parts can be recognized:

- a) base (always present)
In case of a one-piece chamber or manhole, the base part ends at a distance of 300 mm measured from the top of the main channel;
- b) riser (depth dependent);
- c) telescopic part (design dependent);
- d) cone (dependent on the design of near surface components and their recommended installation);
- e) other near surface components

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 124:1994, *Gully tops and manhole tops for vehicular and pedestrian areas — Design requirements, type testing, marking, quality control*